

## CLAIMS

1. A plasma display panel comprising:

a front panel including on a first substrate:

5 a first electrode;

a dielectric glass layer covering the first electrode; and

a protective film provided on the dielectric glass layer,  
made of magnesium oxide (MgO) with oxide added including an  
element with an electronegativity of 1.4 or higher, and

10 a back panel arranged on a second substrate with:

at least a second electrode;

a barrier rib; and

a phosphor layer,

wherein the protective film and the phosphor layer are arranged facing  
15 each other, and form a discharge space partitioned with a barrier rib  
between the front panel and the back panel.

2. A plasma display panel claimed in claim 1, wherein oxide is charged  
negative.

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3. A plasma display panel as claimed in claim 2, wherein oxide is at  
least one of titanium oxide ( $\text{TiO}_2$ ), zirconium oxide ( $\text{ZrO}_2$ ), germanium  
oxide ( $\text{GeO}_2$ ), vanadium oxide ( $\text{V}_2\text{O}_5$ ), niobium oxide ( $\text{Nb}_2\text{O}_5$ ), tantalum  
oxide ( $\text{Ta}_2\text{O}_5$ ), antimony oxide ( $\text{Sb}_2\text{O}_5$ ), chrome oxide ( $\text{Cr}_2\text{O}_3$ ),  
25 molybdenum oxide ( $\text{MoO}_3$ ), tungsten oxide ( $\text{WO}_3$ ), tin oxide ( $\text{SnO}_2$ ),  
boron oxide ( $\text{B}_2\text{O}_3$ ), silicon oxide ( $\text{SiO}_2$ ), lead oxide ( $\text{PbO}$ ), and  
manganese oxide ( $\text{MnO}_2$ ).

4. A method for producing a plasma display panel including:

a process of forming an electrode on at least a first substrate;

5 a process of forming a dielectric glass layer so as to cover the electrode;

a process of forming a protective film so as to cover the dielectric glass layer made of magnesium oxide (MgO) with oxide added including an element with an electronegativity of 1.4 or higher, wherein the process of forming the protective film is one of plasma chemical vapor deposition (CVD) method, sputtering, vacuum evaporation method, or ion plating method.

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5. A method for producing a plasma display panel as claimed in claim 4, wherein a process of forming a protective film is plasma chemical vapor deposition method in which an organometallic compound made from magnesium reacts with an organometallic compound made from a metal including oxide including an element with an electronegativity of 1.4 or higher, using oxygen (O<sub>2</sub>) and argon (Ar), in a reactive box with a pressure of 30 Pa to 300 Pa.

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